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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,273	05/24/2001	Cheol Jin	2950-0194P	9250

2292 7590 09/05/2002

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EXAMINER
PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
2653	

DATE MAILED: 09/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/863,273	JIN, CHEOL	
	Examiner	Art Unit	
	Aristotelis M Psitos	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *See Continuation Sheet* .

Continuation of Attachment(s) 6). Other: FORMAL DRAWINGS FILED WITH CASE HAVE EEN APPROVED.

DETAILED ACTION

1. Applicant's response of 6/27/02 has been considered with the following results.

Specification

2. The amendment to the title of the invention is greatly appreciated.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim Rejections - 35 USC § 102

6. Claims 8 and 10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ishikawa et al

7. Ishikawa et al discloses a speed control system, switching between clv and cav speeds predicated upon detection of various signals and determination with respect to a reference value –see the operation of figure 2. With respect to the claimed language in step (a) of claim 8, applicant's attention is drawn to col. 8 lines 3 plus which also permit the measuring predicated on reading the frame signal from the information record/ this the examiner interprets as the frame sync signal in the ATIP format, and as such also meets the limitations of claim 10.

If applicant can convince the examiner that such frame sync signal is not the well-known ATIP signal frame, then the examiner would take Official notice of such.

It would have been obvious to modify the base system of Ishikawa et al with the ability of having ATIP data in the information/input data, motivation is to use standard recording techniques and save valuable resources but not having to reinvent the wheel.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 8 above, and further in view of Okada et al.

With respect to the limitations of claim 9, as known, frequency of the wobble signal(s) can be detected and measured – see Okada et al at col. 2 lines 54 plus.

It would have been obvious to modify the base system of Ishikawa et al and use detection of wobble frequency since such is considered merely a selection of equivalents, i.e., measuring wobble frequency or frame sync are equivalents.

Repeat V 9. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Mashimo or Maeda further considered with Ishikawa et al and all further considered with Ho et al and Official Notice.

The following analysis is made.

Either Mashimo or Maeda et al disclose recording systems, wherein rotation speed of the optical system is appropriately controlled. Although the information is recorded with appropriate identification of what mode is in use, there is no disclosed ability of detecting such while recording.

The examiner concludes that read – during write operations are notoriously old and well know. It would have been obvious to one of ordinary skill in the to use well-known read – during write ability to permit detection of the input signal for correction thereof prior to final recording.

The ability to determine the current recording speed based on the predetermined signal – i.e., either a discrimination signal in Mashimo or the signals detected in Maeda is taught by the Ishikawa et al reference –e.g. the detection of the atip frame signal. The examiner equates such a determination to be analogous to the determination from either a discrimination signal (Mashimo) or that of Maeda.

Alternatively Ho et al teaches the relationship between position and speed of information at the track – see discussion with respect to figures 5A-B.

The additional step (d) limitation is also found in Ishikawa et al – wherein the comparison is done with respect to figure 2 and as further indicated in col. 8 lines 3 plus.

Finally, the ability to switch recording modes upon such a determination is considered to be evident since the base references are concerned with recording abilities.

With respect to claims 2 & 3, the ATIP signal is both a sync signal. Detection of a period of the predetermined signal is interpreted as the ATIP signal period.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above, and further in view of Okada et al

With respect to the limitations of claim 6, the Okada et al system provides for the encoding ability.

It would have been obvious to modify the above noted references relied upon with respect to claim 1, with the further encoding ability of Okada et al – again, selection of a type of discrimination signal/ predetermined signal to be detected, is considered merely a selection between equivalents. That is, whether the predetermined signal is either: a sync, ATIP, a code indicative of the encoding scheme, or a signal indicative of a mode (CAV/CLV) is not of moment, but equivalent abilities.

11. Claims 4,5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Mashimo or Maeda considered with Ishikawa et al and Okada et al.

Again, either Mashimo or Maeda disclose recording optical systems wherein appropriate discrimination ability to detect either CAV or CLV modes of operation are included.

Ishikawa et al detects an appropriate signal compares such with a reference and permits switch of motor control appropriately.

Okada et al further teaches the ability of using wobble frequency as a discrimination signal.

It would have been obvious to modify the base system of either Mashimo or Maeda and modify such with Ishikawa et al and Okada et al so as to detect a If wobble frequency signal and appropriate control further signal processing as a result of comparing such with a predetermined frequency.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kobayashi et al and Teshirogi et al are cited as illustrative of wobble signal format used in this environment, and motor speed control respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Aristotelis M Psitos
Primary Examiner
Art Unit 2653

AMP
August 29, 2002